

MY BOOK OF  
**TREES**

Written and illustrated by  
**Nimret Handa**

 SCHOLASTIC



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**TREES**

Written and illustrated by  
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**SCHOLASTIC**

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*For  
Nayantara  
and  
Nandika*

## Introduction

Tall, short, fat, thin, erect, sloping, green, brown, and even red – trees come in every shape, size and colour imaginable. And all of us say without plants life on our planet would not be possible. But do you know exactly how and why?

Through a process called photosynthesis, plants not only generate oxygen, they are also the living beings capable of producing food for the animal world and us. Everything that we eat comes directly or indirectly from plants, the most visible of which are the trees. No wonder, trees are important to all of us, for so many reasons.

Look around. Trees not only provide wood for furniture – from doors to cupboards, tables to blackboards, they also give us almost all the fruits we eat, many flowers, oils, honey, rubber, and even the chewing gum that the grown ups are not too fond of. Most of our medicines come from them too. Trees make up forests, which are home to numerous animals, birds and insects. School would be very difficult without trees, as both paper and pencil are by-products of trees! And a universal favourite – chocolate, too, comes from trees! And all this is besides keeping the air clean and making food for us!

Now you see just how important it is to save trees. You must have heard of or read about some people who try to protect trees and the rest of the environment. Maybe you have seen some of them on television. Or heard of a movement called Chipko in the hills of Uttarakhand, where thousands of villagers actually hugged the trees when the trees were ordered to be cut?

And do you also realise that at the rate at which we humans are cutting trees, there will not be enough of them to generate oxygen for all the rest of us living on Earth? We need to save these lovely friends of our planet. Plant one and watch it grow...it's fun. I am sure you will want to grow many more and have a little garden of your own.

## What is a tree?

Trees are plants that live for a long time, sometimes for hundreds of years. They are everywhere around you – in parks, along roads, maybe a few in your lawn, next to highways and of course, most of them are found in forests.

That we can live and breathe is to a large extent made possible by trees. They not only maintain the balance of gases in the atmosphere; their roots hold together the soil, without which no food or agriculture would be possible.

In this book we shall look at some of the more commonly found trees in India apart from the fruit trees – the neem, the gulmohar, champa and many others. But before looking at some tree species individually, let us understand a few more things about trees, and try to find out what is a tree.

### **Types of trees**

You must have realised by now that trees differ from each other, not just when they are actually different species, like neem and mango, but also when they are the same species, e.g. two neem trees.

Even the parts of trees look different on different trees – the leaves, flowers, branches, even roots are differently shaped and sized. However botanists, who study plants, including trees, have made groups of trees or tree families.

Many trees are deciduous, which means they shed their leaves once in a year; usually in winter, e.g. gulmohar, barna or mulberry. These trees are found in temperate climates. They are largely found in plains and low hilly areas and usually have broad leaves.

Trees from the tropical places do not shed their leaves all at one time. There is leaf fall and new growth at the same time, so the tree never looks bare.

Conifers are usually found in mountains and belong to the pine family. They have leaves that are narrow, long or needle-like. They can stay alive in winter because they are tough and thick. Their waxy skin stops them from drying out in the cold. Because they are green they can make some food in the winter. All the leaves do not fall off at once so the tree has some leaves all the time.

Let us look at some features that are common to most, if not all trees.

## Height

The height of a tree can be anywhere upto 20 feet for small ones, 40 to 50 feet for medium sized ones, and about a 100 to 150 feet for tall ones. The really tall ones can even go up to about over 200 feet. The canopy or upper levels of a tropical rainforest is formed by such tall trees and sometimes the birds and little animals that live on top never come down to the ground at all!

Do you know that the redwood trees of California, USA grow up to about 117 metres or 385 feet tall. That's about one and a half times the height of Delhi's Qutab Minar! Climbing down would take awhile, I guess.

## Shape and Bearing

When you stand and look at a tree from a distance, the very first thing to catch the eye is its shape, especially the outline of the crown. The crown can be called conical like an inverted ice cream cone, or cylindrical like a column, or ellipsoid, that is, egg-shaped, or even globular, which means rounded.

### *Look at some tree shapes:*



*Pyramidal*



*Columnar*



*Ellipsoid*



*Oval*



*Globular*

The shape of a tree is affected by its environment. Those trees that grow on poor soil or in harsh climates become stunted. The same trees might grow taller and (more) leafier in better growing conditions as they get more food and water. Therefore trees in desert and high mountain areas are short, scrubby and stunted for they have to cope with harsh growing conditions.

A tree grows best when it has enough water, fertile soil, no harsh winds, the right amount of sunlight and temperature to suit its likes and dislikes throughout the year. The trees have different needs so all types don't grow best in same place or at the same time. Some like cold winters, like the conifers, others need the hot sunshine to flower, like the gulmohar. Some others like moisture, like the rubber tree and yet others like the kikar are best suited for dry places. If trees are cared for, many varieties can be grown in conditions that are not ideal, because they are very adaptable.

Branching in a particular way is important for such long-living plants, as this way they make best use of the available space, providing leaves with the greatest amount of light and air.

The way the branches grow helps create the shapes of trees. To enjoy the form and the beauty of the tree, stand well back and see the trunk, the pattern of the bark, the different colours and the shapes of the leaves. Even small things like buds have diverse shapes. They can be conical, rounded or grouped together in a bunch.

## **Roots**

Roots hold the tree to the ground and equally importantly, provide the tree with food, mainly mineral salts, and water. These are drawn upwards from the soil from the roots.

Most roots are below the ground. Such roots can be deep or shallow. Deep-rooted trees have a taproot, which is thick and long, growing straight down, sometimes equalling the height of the tree. Deep-rooted trees are not uprooted by strong winds, but their trunks are more likely to be uprooted in a gale, a very strong wind. Shallow or surface-rooted trees have roots spreading out in circles in the upper layers of the soil. Those trees that have shallow roots fall over if the wind is ferociously strong.

Some trees like the banyan have aerial roots, that is, roots that are above the surface of the Earth. They grow from branches downwards, like long ropes. When they touch the ground, they begin to root and new trees grow eventually.

As the tree ages, roots change in appearance too, growing woody and gnarled as the years go by.

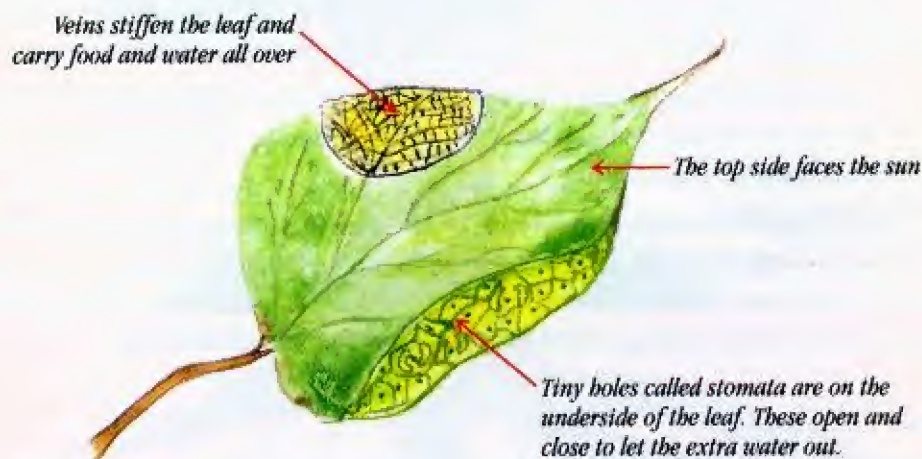
## Photosynthesis

The process by which a tree makes food is known as photosynthesis. This is not a part of a tree, but there is no tree where this process does not happen. For humans, this is the process that is most important, as it makes all food that we eat available to us, directly or indirectly.

But how do the trees make food? Strong but delicate veins hold the leaf out to catch maximum sunlight. They also act as a plumbing system that takes water to the leaf and food to the tree from the root. The leaf skin has a waxy coating to prevent evaporation of water and is transparent to let light inside. You can hold a leaf up and see the light shining through.

Under the leaf skin lie the cells that contain the green-coloured pigment known as chlorophyll. On the underside of the leaf are very tiny pores or holes known as stomata. These take in carbon dioxide from the air and use it to manufacture food. Once the process is over, oxygen, so precious to humankind, is dispersed into the air.

### *How leaves make food -*



## Leaves

A part that you are perhaps most familiar with. But leaves are not just decorative, they make food for the tree.

Leaves come in an enormous variety of shapes, colours and textures; they can be thick or thin, soft or hard, leathery, scale-like, smooth or glossy, huge or tiny. They can be shaped as an oval, or be long, round, sword-shaped or just irregular. There are many terms to describe their

shape: palmate, pinnate, and lanceolate. Try and find out what they look like. Some of the larger tropical plants like the raffia, originally from Madagascar, can grow upto about 20 metres. That's about as long as a tennis court!

### **Flowers**

Most trees have flowers, easily the most beautiful part of the tree. Flowers too come in a vast range of shapes, sizes and of course, colours. Another attractive feature is the fragrance which can be strong or mild but undoubtedly pleasant.

Some flowers are big and showy, some delicate and some are hardly noticeable at all. You may have to look very closely inside the foliage for some to be able to see them. Some flowers are tassel-like, and are known as catkins, like the ones that grow on a willow or the mesquite, two of our common trees.

### **Fruits**

In scientific terms, a fruit is just a layer or layers that cover the seed. But of course for us they mean a lot more. Most of us love some fruit or the other – bananas, peaches, cherries, mulberries, apples, mangoes, guavas, and most other fruits, all grow on flowering trees.

And not just us but many other creatures love eating fruits too. Many birds, animals and insects depend on wild fruit found on trees. Ber, maulsari, berries, and even the nuts found in pine-cones are all favourites of birds.

The fruit actually is a protective covering for the seed. This is something that all flowering plants have. As with other parts of a plant, fruits vary in size, colour, shape and of course taste too. Some are sweet, others sour, and some have a tangy taste that is so refreshing. While humans eat some fruits, many are eaten only by various other animals and birds.

### **Seeds**

Some fruits have just one seed, like a mango while others may have quite a few, like a banana or a pomegranate. Have you got a little tired of hearing that tree parts come in all shapes and sizes. Well, that is true, nature has been a great laboratory where a really huge range of trees and their parts have evolved.

And they all evolve from the seed. Yes, that small, insignificant-looking acorn seed can grow into a huge oak tree equal to a multi-storied building! The fruit forms around the seed to hold it and protect it, till it is ready to fall to the ground for another tree to come up.

## How the tree makes food -



3  
The leaves take in  
air through tiny holes.

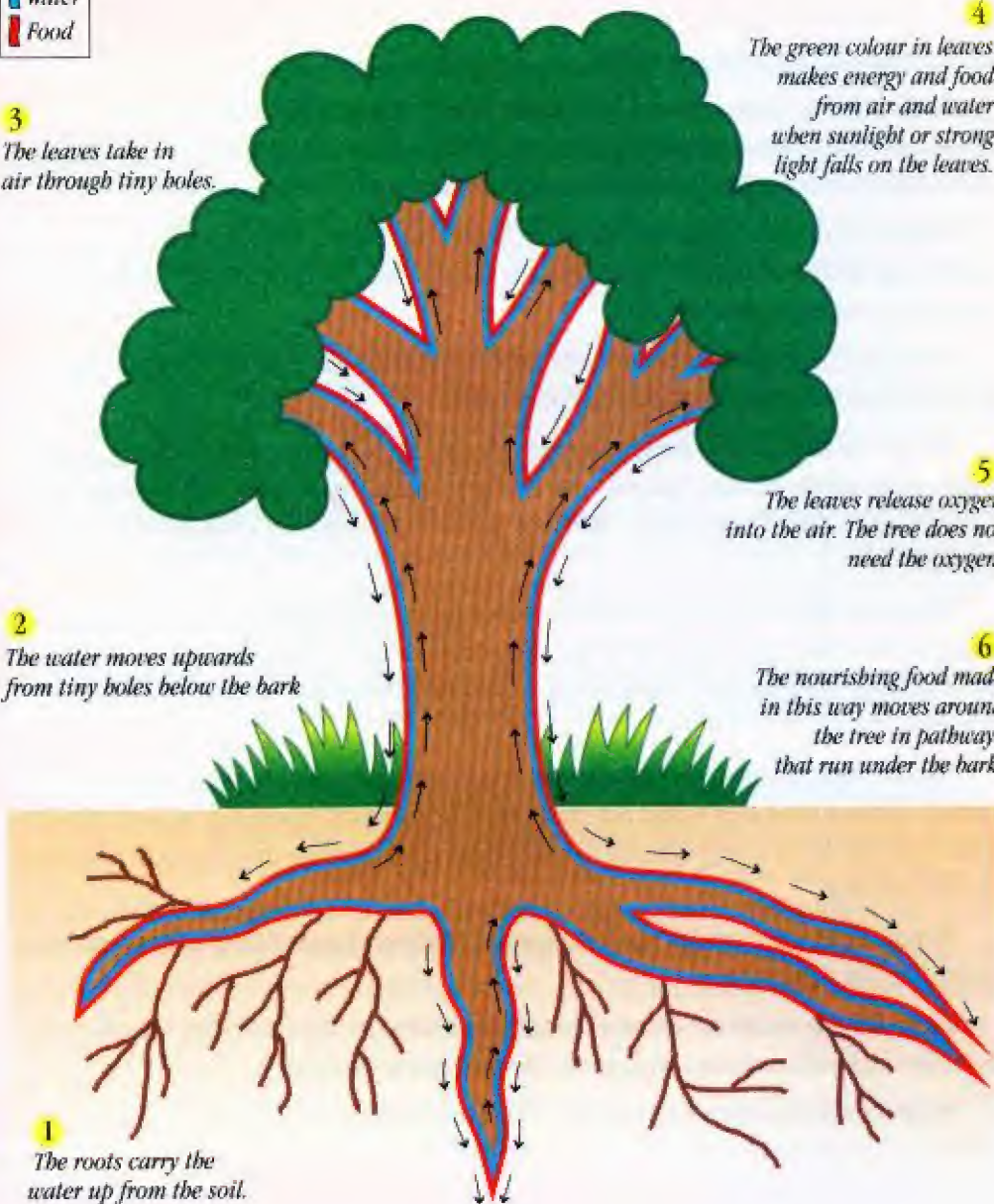
4  
The green colour in leaves  
makes energy and food  
from air and water  
when sunlight or strong  
light falls on the leaves.

5  
The leaves release oxygen  
into the air. The tree does not  
need the oxygen.

2  
The water moves upwards  
from tiny holes below the bark

6  
The nourishing food made  
in this way moves around  
the tree in pathways  
that run under the bark.

1  
The roots carry the  
water up from the soil.



## Are trees useful for us?

Let us see what the trees provide us with:

Tables, chairs, cupboards, doors, bulletin boards – almost all the furniture that we use everyday is made of a major tree by-product, wood. Trees provide us with wood for furniture, for construction and making tools. So even when we are indoors, trees are with us.

Many trees also provide us with medicine, such as the willow, which provides aspirin. The neem is called 'the home doctor', as all its parts like the bark, seeds, leaves and even the roots are used for making medicines.

Pesticides are made from neem seeds and bark, and the leaves are very useful if they are forked into the soil as they keep away creepy crawlies!

We get lots of fruits and nuts from trees. Mango, apple, papaya, guava, cherry, apricot, peach, litchi, all the berries, banana – the list looks unending. Besides in many parts of the country, especially in rural India, different parts of the tree are cooked and eaten as vegetables.

Again something we cannot do without - paper, too comes from the trees. So do a variety of products like rubber, gum, lac, honey and many other products. Even some types of cloth are made from tree bark and pulp. Indian fabrics coloured with vegetable dyes are known for their richness.

There are many, many indirect benefits too. It is trees that provide a home to many birds and animals. Without trees they would not exist either. It is a joyful experience to hear the birds twitter and sing and it is very relaxing to watch them go about their daily business of feeding and nest building.

Without trees, there wouldn't be forests either. All the creatures of the forests would find it hard to live, if at all they can.

While walking on the streets on a hot summer afternoon, are you happy when you pass under the shade of a tree? I am... Very much. The cool green umbrella!

All this besides making our food and air? Well, some people...er, trees are generous.

## Trees in India today

In India we find trees of many different kinds as our climate and topography varies from place to place. There are trees that grow near the snowline, and those that grow in the sandy soil of the desert. The moist tropical forests of the Western Ghats have their own kind of luxuriant trees. The north-eastern parts of the country, with their heavy rainfall, have trees that are quite different from those found in the rest of the country. Also this region is so rich in bio-diversity and the range of flora and fauna that the UNESCO has declared it to be a region of special importance.

About 70 to 80 years ago forests covered many more parts of India, but now our forests are reducing at an alarming rate as they are being cut down very fast. This process of losing forest cover, called deforestation, is happening as trees are cut for timber or land is cleared for growing crops to meet the needs of our enormous population.

Forests are cut down to make way for fields, for building towns or construction of projects for electricity and water, for building factories and hotels. People in cities even cut down trees because they think too many leaves fall on their lawn or car! A tree, as you can see, has to survive against several odds and it is not always easy.

Even though there are some people who are very dedicated in their efforts to save trees, others are the most dangerous enemy trees have! They do not realise that we owe our very existence to trees.

Replanting is not done as quickly as the trees are cut, and even if it were, it is twenty to thirty years before a well-grown forest replaces it. In the meantime damage is already done to the soil and changes occur in the climate. The animals and species of trees and other types of vegetation, found in a particular forest, are lost forever. In fact due to over-cutting of trees many types of trees have already been lost forever. What is worse, due to our present policies of 'development', many more trees might be lost soon. The UN has already declared the Western Ghats to be an 'ecological hotspot', which means the region is in danger of losing its trees, thereby losing all other plants, animal, insects and birds of the region too.

Do you realise how important, and yet how easy it is to love and care for trees. Take care of them and next time you see someone harming a tree, tell them how they are actually harming themselves.



## THE BABOOL TREE



The babool or the kikar is perhaps the best known tree of the drier parts of the country. It is a medium-sized tree with a grey-brown bark and very delicate feathery foliage.

From July to November the tree is covered with fluffy yellow balls of flowers that come out in groups. The scent of the flowers is hard to describe – lemony, with a hint of fresh spice. Mornings and evenings are the best time to smell the flowers.

The whole aspect of the kikar tree is soft, but don't get taken in, it has long white thorns at the base of each leaf stalk! These thorns are meant to protect the tree from too many animals browsing on its tender foliage. The tiny leaves fold themselves flat when it is very hot or at night, giving the tree its ability to survive the harsh weather. It does well in the deserts and arid zones. The seed-pod is shaped like a string of beads at regular intervals.

This tree is also very useful in traditional medicine. The bark has a sharp acid known as tannic acid, a remedy for gum troubles, as well as in tanning and dyeing. The twigs are used by many as '*datuns*', which serve as toothbrushes and paste rolled into one! The next time you walk by a babool tree you can also break off a soft twig and use it as a toothbrush too!

Beware of the long thorns lying under the tree as they can prick the thickest of soles. Earlier, the thorns were used in offices to pin sheets of paper together!

### Did you know?

The toothpaste tree!  
That is how most people around the country know babool as its twigs are used to clean teeth.



## THE BANYAN TREE



The banyan is a very distinctive tree to look at. It is large, with a rounded crown and shiny, dark green leaves that are oval-shaped, a bit like large eggs. An old tree is unmistakable for it has long rope-like roots dangling from the branches to the ground. These 'long matted hair' of the tree root in the earth when they touch it, and in this way a new tree grows. Over the years many trees grow next to each other and if left undisturbed, they can form a small forest of their own! For this reason, the banyan is meant to represent eternal life.

From the spring onwards the banyan has red berries growing in pairs all over its body. The fruit lasts till the end of the hot weather, though sometimes there is fruit on the tree all the year around. Birds, bats and squirrels love the berries and there is quite a party when the tree is loaded with fruit. The seeds are spread by birds and other animals in their droppings and in this way new trees can spring up too. Banyans, like peepal, belong to the fig family.

Another well used name for the tree is 'bargad'. It is said that the Buddha gained enlightenment beneath its spreading branches. It is considered sacred by the Hindus and worshipped on certain days of the year.

In earlier days banyans were planted along roadsides for their deep, cooling shade; travellers could camp under them. The banyan casts such a deep shadow that nothing grows under it, and the ground beneath it is bare.

### Did you know?

The banyan has aerial roots, i.e. the roots hang in the air. They are so strong that very often children swing from them.



## THE **BARNA** TREE



One of India's most beautiful flowering trees is the barna. Its flowers resemble a group of fluttering white butterflies poised for flight. If you happen to see a tree such as this between early April and mid May, most probably it is the barna.

The young flowers are greenish-white with green stamens. As the flowers grow older they become a delicate cream and the stamens turn purple. This mix of cream and white flowers on a leafless tree is a dainty sight, and the bloom is delicately scented. Each flower has five delicate orchid-like petals with a cluster of stamens curving out from the centre.

The fruit is a round berry, the size of a table tennis ball. When young, it is green and hard, when ripe it turns bright red, speckled with white. The yellow pulp inside is sweet sour and birds love it! When all the berries turn ripe and red the tree seems all decked up.

The leaves are trifoliate, that is, they grow in threes, rather like a trident or a '*trishul*'. In some places the tree is considered sacred. In the forests it is found growing near rivers and streams, where fruit-loving animals come to enjoy its red fruit.

Interestingly, before combs were made in plastic, barna wood combs were very popular. If you stay in a very old house or go to a craft fair, you may spot one even now.

### **Did you know?**

In April, if you see a tree that looks like it has hundreds of fluttering white butterflies poised for flight, look closely. It is just the barna tree flowering.



## THE BAUHINIA TREE



The bauhinia, or the kachnar as it is commonly known as, flowers in March just after the cold winter. The branches are bare, without leaves, when the tree bursts into clouds of pink, white or mauve blossoms. The delicate orchid-like flowers resemble butterflies fluttering in the breeze, that is why this tree is also sometimes, like the barna, called the butterfly tree.

The flowers have five petals. The petals are narrow at the base and widen out at the top. One of the petals is differently coloured from the other four. Five delicate stamens curl out like the proboscis, or drinking tube of a butterfly.

The most popular among the species is pink bauhinia, which is widely planted in gardens and on roadsides. It blossoms in autumn and spring. The flowers have some medicinal properties found useful in treatment of arthritis.

These trees are easy to tell because their leaves are shaped like a camel's hoof or a twin kidney. There are many varieties of this tree and some may have small leaves whereas the others have medium-sized leaves.

The flower buds are tasty when they are cooked as a vegetable. The *sabziwala* brings them when the kachnar is flowering. Animals in the forest eat fallen buds. When the tree stops blooming, seed pods shaped a bit like beans hang from the tree. These too make a delicious vegetable. The bark of the tree is used for dyeing and tanning.



### Did you know?

Bauhinia is named after two botanist brothers John and Casper Bauhin.



## THE CORAL TREE



The coral tree has an interesting legend associated with it. Apparently this tree impressed Krishna so much by its beauty that once, when all the gods were fighting and arguing in heaven – where the coral tree was found originally – unnoticed by them, he stole the tree and brought it down to the earth for us to enjoy its beauty.

Around the middle of March the coral tree, also known as the pangri, bursts into bloom. The flowers grow together in spikes. Each bright red flower is shaped like a parrot's beak. The leaves are large and composed of three leaflets arranged in a trifoliate pattern, that is, rather like a *trishul*. They are meant to represent the Hindu trinity of Gods: Vishnu, Brahma and Shiva.

Many insects and birds flock to the tree for nectar. A popular tree for many a winged creature, when in bloom the chattering of birds and the hum of insects can be heard from a distance. Sunbirds love the nectar of these flowers.

The trunk is straight. Lots of branches have prickles on them while they are young – a thorny protection from grazing animals. Be careful when you touch the tree when it is young. The smooth bark is green-grey and peels off in papery flakes.

When the tree has finished flowering, big green pods appear on it. These are eaten as vegetables along with the new, tender leaves in various parts of the country.

### Did you know?

The coral tree is grown in coffee and rubber plantations. In summer, coral leaves protect the young plants while in winter the coral leaves fall off, allowing the coffee and rubber plants to get adequate sunshine.



## THE CREPE FLOWER TREE



The crepe flower tree gets its name from its beautiful, large flowers with six crinkled petals that look as though they have been made from crepe paper. The flowers can be in shades of bright pink, magenta or violet. About two dozen flowers grow upwards on a stalk, and from a distance they remind one of pink candles held aloft in between by the leaves of the tree. A mass of stamens crowds the centre of the flower. Honey bees are very fond of the crepe flower.

This tree, also known as the jarul, is not very tall and blooms around May and continues to flower in flushes till the monsoon is over in September. Sometimes the tree flowers for a while and then the flowers die down, it does not always mean that it has stopped flowering, very often it will burst into bloom a second or a third time. This is called a flowering flush. After the flowers dry, round seeds appear on the stalk. These gradually turn brown and stay on the tree till it loses its leaves late in the winter.

The leaves are thick, large and oblong with pointed ends. Just before the leaves fall in the winter they change colour and can be found on the tree in shades of red, copper and orange-yellow.

The root, bark, leaves and flowers are all used in making medicine. This is a wonderful tree to plant in the garden because when in bloom it looks spectacular.





## THE DEODAR TREE



The deodar is one of the most majestic trees of the Himalayas, found at a height of 3000-4000 metres. Over the years it grows tall and taller still. The branches are spread wide and are held out in a horizontal fashion at regular intervals. If you view the tree from a distance, you will see that the shape of the crown of the tree is somewhat akin to a pyramid or an inverted cone.

The deodar has needles for leaves like the pine, but the only difference is that the needles are shorter, about an inch and a half long; they grow together in clusters. The cones of the deodar are barrel-shaped, with the scales overlapping each other.

The deodar is also known as the Himalayan cedar. The wood is fragrant, light, golden white in colour, and is termite-proof and strong. That is why it is used widely in furniture making. Oil extracted from this wood is used in different chemicals and pesticides. Sometimes when a lot of trees are growing together, in a grove, the cedar scented air is very invigorating to be in. This is the reason why sanatoriums for invalids were built near deodar and pine forests.

Pines and cedars release some beneficial aromatic compounds in the air. If you stand in a cedar forest you can smell the lovely, sharp perfume and feel very energetic. The pine and the cedar are our best-known conifers of the hills. The wood, bark and the leaves all contain turpentine. Cedar wood chests are very useful for keeping moths away from woollen clothes.

### Did you know?

You might have seen painters dilute paints or clean brushes in a kind of oily liquid. This is turpentine, which is extracted from the deodar.



## THE DEVIL'S TREE



A tree for those amongst you who enjoy the supernatural. There is a common traditional belief that this tree is haunted by evil spirits. Forest people refuse to sit under its shade thinking that an evil spirit will cast a spell over them. Or even whisk them away! They also think that if someone happens to fall asleep under this tree they will not wake up again. I don't believe this, do you?

The devil's tree or the *sbaitan* is best known for the spicy smell of its flowers. It begins to bloom sometime in September and continues to flower till the end of October. Much before you come upon a tree, you know that it is nearby because of its strong spicy smell.

The flowers are small like greenish-white stars. A whole lot of them come out in a cluster at the end of a stalk. Honeybees and other nectar-loving insects have a field day when the tree is blooming. The flower clusters give the effect of snowballs set in dark green foliage.

This tree is very commonly planted along avenues, because it grows tall and has a straight trunk. The oval leaves are thick in texture and about five or seven of them come out together from the end of a little branchlet, as shown in the picture. Usually seven leaves form a group. This has given rise to another name for the tree, *saptparni*, or seven-leaved.

### Did you know?

Also called 'scholar's tree' as its cream-coloured wood was used for making writing boards for students when notebooks were not common.



## THE FLAME OF THE FOREST TREE



The forest is on fire! That's what your initial reaction is going to be when you see this tree, also called palash, in bloom in April–May. The flowers are deep orange and vermillion and grow in masses at the end of thick green stalks. Each flower, brilliant red, is shaped like a very large pea flower, with the central petal shaped like a parrot's beak.

The flowers are full of sweet nectar and plenty of jungle birds, butterflies and honeybees flock to the tree when the palash is flowering. If you stand under the tree at this time, all you will be able to hear is the chatter and buzz, which drowns every other surrounding sound.

The leaves grow in threes, one on top and two on either side of the stalk. The leaf in the middle is meant to represent Vishnu, with Brahma on the left and Shiva on the right. These are silvery green, soft and velvety to touch and look very beautiful even when the tree is not flowering. The tree trunk is short, and twisted.

When the leaves are older, they become quite tough and are sown together to make leaf utensils! These leaves are what the local *chaatwala* serves you in. During the festival of Holi, palash flowers are used to make a deep yellow colour that is sprayed on people. This colour is gentle and does not cause rashes or illnesses as strong chemical colours do. The tree is also known as kinshuk, dhak or tesu.

This tree is great as an air purifier, controlling pollution and is highly useful to the patients of arthritis and those who have digestion problems. The botanists believe that it acts as a replenishing nutrient for the soil, rich in natural salts.

### Did you know?

The palash is said to have grown from a falcon's feather dipped in *soma*, the drink of the gods.





## THE FRANGIPANI TREE



The frangipani tree looks as though its branches are somewhat swollen and misshapen. However this impression is only at first glance. When the eye travels upward to the leaves and the delicate creamy-white flowers, one is struck by the sheer beauty of the tree.

The flowers have five-petals with their 'throats' stained a yellow-gold. Turn the petals over and you will see that they are streaked with pinkish lines. Another variety has deep pink flowers. The scent of the flowers is pleasantly strong, especially in the evenings.

Do you know how this tree got its name? Oh, it's an interesting story. In the Middle Ages, an Italian called Frangipani made a perfume from the lovely blooms – so the tree is named after him.

The leaves of the tree are large and oval and about eight inches long. They are a deep green, a good background for the creamy-white flowers. The tree sheds its leaves in the winter. New leaves and flowers come out in spring. A cutting from this tree will root in no time at all. It does well even in a large flowerpot.

The tree is also known as the temple tree, the pagoda tree or gulachin. When the bark of the tree is nicked, a milky sap flows out. Sap is a liquid that carries food to all parts of a plant. This is used as medicine to relieve fever and sores. In some areas it is used for relieving aches and pains.

### Did you know?

The frangipani is often planted near Buddhist pagodas and is also therefore commonly called the 'pagoda tree'.



## THE FRYWOOD TREE



No, the wood of the frywood tree is not meant to be fried and eaten! The tree is named so because in spring it has long golden pods, about twelve inches long, which rustle and crackle in the breeze and almost sound like food being fried! The tree is also known as the shirish.

It has a light, lacy spreading crown. Each leaf is pinnate, which means that many smaller leaflets grow opposite each other along the central stem and form a bigger leaf. The flowers are like fuzzy, light green powder puffs. They are delicately perfumed, with the perfume growing stronger towards the evening. The tree always has a swarm of honeybees around it. Crows love to crack open the long pods and eat the seed inside.

The tree is commonly found in forest as well as city avenues. The bark, after drying, can be pounded and used to make a kind of soap. Reddish gum oozes out of the cracks, and this is commonly used in traditional or folk medicine.

As the pods clatter in the wind, they mean different things to different people – so various names have been given to the tree. A rather playful name is 'woman's tongue,' based on the common impression of women being chatterboxes. Another name by which it is referred to is 'monkey's earring,' as it is commonly believed that monkeys hold them up to their ears like earrings.

### Did you know?

When the pods of the frywood tree rustle in the wind, it sounds like food being fried.



## THE GULMOHAR TREE



Everyone is familiar with the gulmohar because of its striking, bright red flowers that flower in summer. A gulmohar, fully covered with masses of brilliant red blooms outlined against a blue sky is indeed a spectacular sight.

Each flower has five petals shaped like spoons, with the 'handle' of the spoon at the centre of the flower. Four of the petals are crinkly and feel velvety when touched, but one petal, slightly larger than the rest, is yellow and white and streaked with red. The streaks are called honey guides, because they act as lines to show the way to insects and birds when they are hunting for nectar. Delicate red stamens curve out from the centre of the flower, which reminds one of an orchid. Each flower can be about four inches across.

This is a large tree, which grows to a height of about 40 to 50 feet. The branches are spreading with feathery leaves. The fruit of the tree is a long green pod that gradually turns brown. Inside the pod are seeds that are oblong-shaped. Birds eat them.

This tree is originally from Madagascar, a large island off the eastern coast of Africa, from where the seeds were brought. The tree has an interesting name, the 'Flamboyante', which means, clad in brilliant splendour.

Some people believe that the touch of the gulmohar root takes away the pain when a scorpion bites.

### Did you know?

The reddish streaks on the petal are nature's way of marking a path to the treasure of honey in the centre of the flower.





## THE HORSE CHESTNUT TREE



A tree from the hills, the horse chestnut has an imposing appearance when it is fully grown. It has a large crown, great height and a thick trunk. Very often planted in hill stations as an avenue tree, it has leaves that are palmate on long stalks. Each leaf has seven to nine long pointed, toothed leaflets that are arranged in

finger fashion. In the winter when the leaves fall, the tree is covered with large sticky buds.

It flowers in May and June. The flowers are a creamy white with a yellow throat. The base of the petals is finely streaked with a deep red. As many as eighty or ninety flowers grow on an upright spike, which from a distance looks like a candle held aloft the tree. The flowers open from the base of the spike upwards.

The fruit of the tree is the horse chestnut from which the tree gets its name. The outer covering is green and gradually turns into brown with a hard, shiny, oval nut. This is known as a 'conker' and is used by children to play games. I have seen monkeys playing games with conkers too. Beware of an angry monkey sitting on top of a chestnut tree, it might just throw a conker at you!

The horse chestnut is not edible; the edible or sweet chestnut also grows on a tree from the hills, but this tree is quite unlike the horse chestnut, though the fruit is enclosed in a similar green outer covering. Horse chestnuts and their leaves are used to make strengthening washes for the hair.

### Did you know?

The horse chestnut nut is something you must have played with. Did you know it comes from this tree?



## THE JACARANDA TREE



Early in April, violet-blue flowers cover the Jacaranda tree like a mist. The flowers are tube-shaped and open out into five petals. They look like miniature trumpets and grow together in sprays. When the sunlight is strong the colour of the flowers is very soothing to the eyes. The leaves are

finely cut and remind one of feathery ferns.

Much later, when the flowers have fallen off, the tree has a delicate look with its elegantly cut leaves and the flat, round green fruit. By winter the fruit becomes woody and brown and begins to look like castanets, which are small wooden musical instruments used in Spain. If you knock one fruit against another you might be able to hear a sound very much like that made by a pair of castanets.

The Jacaranda was brought to India many years ago from Brazil. In Brazil and its neighbouring countries of tropical South America, people use the bark and leaves of this tree to make medicine. There the tree grows very tall, perhaps over fifty feet, though in India it is not usually that tall.

The tree is also known as the nila gulmohar.

### Did you know?

So lovely is the tree that many girls in Latin America are named 'Jacaranda', the beautiful blue flower.



## THE JUJUBE TREE



Another tree which gives us a popular edible product, the jujube or the ber is commonly found all over the drier parts of India. This is a small thorny tree, with a somewhat twisted appearance. The dark green leaves are oval with three long veins running upward. The

underside of the leaf is silvery green or beige in colour and velvety to touch. Look out, there are sharp thorns on its branches!

From April to June the ber tree blooms with tiny greenish-white starry flowers. They are not very noticeable till you search for them. After flowering, the tree is covered with tiny green fruit with a hard stone in the centre. The green berry is tart with a soapy aftertaste, but once it ripens it is delicious. The colour becomes a reddish brown and the pulp is sweet-sour. It is an incredibly tasty fruit. *Berwalas* sell them mixed with salt and tangy spice. Perhaps one sits outside your school, children are their best customers!

Plenty of ber trees grow in our forests. Monkeys, birds and squirrels love the fruit. A fruiting grove is full of birdsong. Deer also stop by to eat the fallen fruit. Many traditional remedies are made from the bark and leaves of this tree. Sweet pickles and chutneys are also made with ber and jaggery (*gur*). Silkworms are fed on the leaves of the ber tree. This is also one of the trees on which the lac insect is found.

### Did you know?

You must have eaten ber, and found it delicious too. But this is cultivated ber, the wild ber is even more lip-smackingly tasty. Well worth hunting for!



## THE KADAMB TREE



During summer have you ever passed under a tree where the air seemed heavier? With a sticky, sweet smell? It was most probably a kadamb tree that you were passing under. In the summer heat, the fragrance of kadamb flowers hangs heavy in the air, and can be smelt about a 100 yards away from where the tree actually grows. Sometimes the perfume is musky and overpowering.

This evergreen tree is commonly found in the hot tropical belts in India, Nepal, Sri Lanka and Myanmar.

From about the middle of June to about early August, the tree is in bloom. And yes, notice the deep saffron colour of the flowers. They are shaped like ping-pong or table tennis balls stuck to the leaves. If you look really close, you will see that a lot of really tiny, star-shaped blooms are crowded together on a globe-shaped part of the flower. When the flowers dry up, this round part forms a brown fruit. The fruit dries out and stays on the tree till winter.

The leaves of the kadamb are broad and oval-shaped and have a pointed tip. They are covered with soft, hair when they are young. The kadamb sheds its leaves in the cold season, and the tree seems to be studded with the dried, polka dots of the fruit. The sweet and sour fruit, eaten raw, is very popular among the villagers in India.

This tree is supposed to have been a favourite of Lord Krishna's. This was probably because forests of it grew around Vrindaban, where legend has it that his home was. Honey bees find the flowers rich in nectar and flock to the tree till twilight.

### Did you know?

The bark of kadamb has some antiseptic properties and is often applied to skin rashes and cuts.



## THE KANAK CHAMPA TREE



The kanak champa or the karnikar tree is one of our most handsome trees. It comes from the moist forests of the north-eastern parts of India and Myanmar, but is now found in other parts of India too. So long as it has enough water, it grows quickly. The trunk shoots up straight and tall. The branches have a great outward spread, which provide thick shade in the summer.

This tree flowers in the first half of April to May. The flower buds look as if they are long, downy brown pods. These split into five slender sections or sepals, which curve over backwards to show creamy-white long petals. If you touch the petals, you will feel you are touching silk. A tassel of ivory filaments is enclosed within the petals

When the wind blows hard, the undersides of the leaves are shown up. These are rusty-red and downy. The contrast between the deep green of the wide leaf and its reddish underside gives a curious appearance to the tree, which almost resembles a painting.

The leaves are big and tough, and are often fashioned into plates and then dried. In many places they are widely used during festive occasions to serve food on. Maybe next time you have a party, you could try them out. And they are biodegradable too. You can try drawing this tree when it is blown by the wind and colour it in a mixture of reds and browns.

### Did you know?

Dried kanak champa flowers are often kept in between folded linen and clothes to scent them.



## THE LABURNUM TREE



Can you imagine a tree draped in a mantle of gold? That is what a laburnum tree looks like when it blooms in the hot summer months of May and June!

'Yellow Rain' is what some people call this tree. In Hindi, it is known as the amaltas. The laburnum flowers in summer, from mid-April to the end of July and then through the rains. There are fewer flowers during the rains than earlier.

The flowers grow in long drooping clusters, almost like a bunch of grapes and the fresh green leaves grow opposite each other on the stalk. There are about six to eight leaves on each stalk. The flowers have five oval petals and are delicately scented. Early in the morning if you stand under a laburnum tree it smells very sweet.

The laburnum sheds all its leaves just at the end of the cold weather, this is when you notice long brown pods hanging from it. For this reason when the Dutch came to India, they called it the pudding pipe tree. Beware, the seeds in the pod are slightly poisonous. Animals in the forest, especially monkeys, like to eat the pulp, which surrounds the seeds. The pods are green when they appear just after the tree stops flowering; they stay on the tree for about a year, and then turn brown before they drop off.

The laburnum is a useful tree, and even provides food sometimes. Many tribal people eat the flowers when food is scarce. In folk medicine the pulp from the long pod is used as a cure to constipation. The bark of the tree is used for dyeing cloth.

### Did you know?

As the laburnum appears covered in gold when it is flowering, it is also called the swarnabhushan in Sanskrit.



## THE MAHUA TREE



This is one of our best-known trees, mostly found in the central Indian forests. The mahua grows on its own rather easily. It starts flowering soon after winter. The flowers hang in close bunches by a dozen or so from the end of greyish branchlets. The white flowers are sticky and have a musky smell and bloom at night. In the morning they fall to the ground, where they are relished by the animals of the jungle.

But the flowers are not only for the animals! Humans eat them too. They find them very tasty as a vegetable. Families camp under the trees at night to gather the flowers at dawn. The flowers are dried and mixed with sal seeds, other leaves and so on to be made into yummy desserts. Sugar can be made from them too.

An extremely strong alcoholic drink is also made from mahua flowers. Bears and elephants often get drunk after a wild, jungle mahua flower party!

Forget the intoxication, the tree has other uses too. The fleshy green berries that ripen a couple of months after the flowers have fallen are used to make oil, which is used for cooking and in making soap.

### Did you know?

They say that bears are very fond of feeding on the fallen, fermented flowers of the mahua. Sometimes after a feast of these they get drunk and are found swaying in the forest!



## THE MEXICAN SILK COTTON TREE



You will know winter is around the corner when you see the chorisia or the Mexican silk-cotton tree flowering. Known as a herald or announcer of the approaching of winter, the tree bursts into a mass of shocking pink, five-petalled flowers, each with a long protruding stamen, at the end of October. Each pink petal is frilly around the edges. The throat of the flower is yellow, finely streaked with brown lines, which look as though they have been painted with a fine brush. The lines are called honey guides and show insects the way to the nectar. Sunbirds are very fond of the nectar from this tree.

The unopened buds are quite circular, almost like green-brown marbles. Some trees have cream flowers, whose petals are so soft that they seem to be fashioned out of satin. The leaves are palmate, which means, shaped roughly like a palm. Five or seven leaves make up a larger palmate leaf. The leaves have toothed edges, as you can see in the pictures.

The trunk of the tree is green with a tinge of grey, and covered with prickles, especially the younger trees. The trunk is shaped like a bottle and leans over in one direction. In Latin America, the chorisia is called 'the drunken stick' for this reason.

After flowering the tree has a few green pods filled with soft fluff growing on it. In the country of its origin many more pods develop on the branches.

### Did you know?

When the tree is young, the trunk is covered by thorny prickles, to protect itself from getting eaten.



## THE MILLETTIA TREE



The lavender lace-work of the millettia is a sheer delight to the eyes. Delicately outlined against the blue sky in the months of March and April, the whole tree is clad in tiny pea-shaped lavender flowers (they belong to the same family).

If you look closely, different parts of the flower are tinted in rose, mauve and purple. The flowers grow on thin stalks, many of them grouped in a cluster. When the tree is in bloom, hardly any leaves can be seen on it. But as soon as the blooms begin to fade away, oval leaves with pointed tips begin to peep forth. The colour of the leaves is a fresh green and very often the leaves that are just appearing have a reddish tinge.

Very soon after flowering the tree is covered with thin green pods, about three inches long. These contain seeds, which when ripe turn a reddish-brown.

This tree is from the forests of Burma (Myanmar) and is also known as the Moulmein Rosewood. In Burmese they call it Kway-tanyeng. These trees grow to their tallest heights in their natural home, the moist green tropical forests.

The seeds of the tree are used in an unusual manner. Millettia seeds are used to intoxicate fish, so that they float on water! That's an unusual way of using tree seeds!





## THE MULBERRY TREE



Do you like shahtoot? Well, this is the tree it grows on. So next April or May, when you see the mulberry tree covered with deliciously messy fruit in shades of wine red and deep purple, maybe you could have some straight off the tree. But be warned, the juice from the mulberry is an

inky purple and stains clothes. And you will have competition – mulberries are hungrily devoured by birds, squirrels and other animals in the forest too.

The mulberry is a medium sized tree with a nicely rounded crown. The leaves are lobed with toothed edges, as you can see in the picture. The leaves are not only beautifully shaped but remain a fresh green till they fall in winter. The tree stays bare till spring when new leaves come out, followed by fluffy catkins, which are actually very tiny flowers growing tightly together, giving the appearance of a hanging cat's tail. After the catkins fall off comes the juicy fruit.

More competition. Silkworms are fed on the mulberry leaves. For this the trees are grown on special plantations and only used to rear silkworms. The worms can eat all the leaves they want and then spin a cocoon from which silk is made.

Jams and wines can be made from the fruit. Sometimes a very tasty cough syrup is made from the ripe fruit as a home remedy. Finally, I'll let you into a secret. If your clothes and hands are stained purple with mulberries, you can clean the stains by rubbing them with the juice of its green fruits.

### Did you know?

The young branches of the mulberry are very supple and can be woven into baskets and even furniture.



## THE NEEM TREE



A tree used in many ways, the neem is amongst India's best known trees. It is also a great air purifier. A beautiful tree with a rounded crown and straight trunk, it has leaves that curve like sickles, with toothed edges and a pointed tip. The starry, creamy white flowers appear soon after spring. Bees flock around the flowers for the nectar, and neem-scented honey is a delicacy.

The neem or the margosa tree is like a magic medicine chest offering cure for many ailments.

Margosa oil is pressed out of the kernel, and used for skin problems, aches and pains. The leaves are antiseptic, and people in many parts of the country rub them on the skin when it gets hurt. It is also useful in all skin problems. The juice of the leaves is given to purify the blood. It is very bitter but good for you.

The bark and the gum that ooze from it are also used in traditional medicine. The twigs of neem are used as a toothbrush to clean the teeth. A pile of dried neem leaves burnt indoors shoos away the mosquitoes. Tender neem leaves and its small fruits are rich in protein, calcium, iron and vitamin C.

There's more. Very often neem leaves are hung outside doors as a protection from the harmful odours and epidemics. The dried leaves are put in layers of stored woollen clothing to keep moths away. If they are put at the bottom of a flour or rice bin, they keep away the weevils. The wonderful neem has many uses. Maybe you could try to find some of your own!

### Did you know?

The small crushed fruit of neem when spread in fields not only protects the crop from pests but also works as a fertiliser saving the use of urea to the extent of 25-50%.



## THE PEEPAL TREE



One of our best known trees is the peepal, known especially for its long life. All through the winter its bare branches are outlined against a clear blue sky. As the weather gets warmer, small translucent leaves begin to appear at the tips of the branches. Most of the young leaves are a garnet red and turn into a fresh green as they grow older.

The leaves are heart-shaped, and have a little tail towards the pointed end. When the light filters through the tree, the strong veins of the leaves can be seen clearly. On a breezy day it is very soothing to sit under a peepal and enjoy the music of the leaves as the breeze blows through them.

The tree has a smooth ochre-grey bark, which grows ridged as it gets older. Old trees can be very tall with a wide spreading crown. This tree belongs to the same family as fig trees. The fruit is a little purple-red fig, the birds' delight.

A tree full of fruit is a haven for birds; large and small. Barbets, starlings, mynahs, pigeons, doves and chattering bulbuls make a beeline for it. Elephants love eating peepal leaves too. Its leaves and bark are used in traditional medicine.

Peepal was one of the oldest forms of exchange of goodwill between the kingdoms. A sapling of peepal carried across to Sri Lanka around 288 BC is one of the biggest and oldest trees today.

### Did you know?

The red colour of the new leaves is nature's way of protecting them from the ultraviolet rays of the sun; they turn green as they become stronger and are able to cope better with strong light.



## THE PINE TREE



Pines grow mostly in the hills, where they are called chir trees. They are evergreen, which means that they do not shed their leaves at one fixed time of the year, but are clothed in greenery in all the seasons. Their leaves shed a few at a time and new ones grow in a continuous process. So if you want shade all the year around the pine is ideal.

Like other conifers, pines grow tall and have straight trunks. The bark is reddish-brown and furrowed. The leaves, which are known as pine needles, are a deep green, though lighter in younger trees. When crushed, they give off a sharp resinous scent, which is very refreshing. The leaves grow in clusters of three to five, which together form a bigger mop-like cluster.

Everyone is familiar with pine-cones. These are woody and contain pine seeds. The cones grow from the flowers at the tips of new branches. After a year the cones ripen and then on a dry day the scales open and the seeds fall out.

Pines are very important in the hills as turpentine is tapped from their bark. Some kinds of pines have seeds that can be eaten, these are known as chilgoza or pine nuts. Other pines have seeds that are eaten by hill birds. They crack the cone and extract the seed to eat it. Pinewood is very useful for building houses in the hills and for furniture too.

### Did you know?

In summer, sit under a pine tree and listen to the music as the wind goes through the leaves. It's heavenly.



## THE PINK CASSIA TREE



Though this tree is sometimes called pink shower, pink cloud is probably a better name. Because that's what it looks like in May, when the flower-laden branches of the tree look as though they are enveloped in a fluffy pink mist. Sometimes the branches are actually so weighed down by the flowers that they almost sweep the ground.

The branches are sturdy with plenty of feathery-leaved branchlets. The leaves are from six to ten inches in length. Actually a large leaf is made up of eight to fourteen pairs of leaflets growing opposite each other. These type of leaves are known as pinnate leaves and can be found on many types of cassias, which are close cousins to the one we are talking about.

The pink flowers, each with a slender stem, grow in bunches. When they are a few days old they turn almost white, so the tree looks covered with pink and white flowers, almost like delicate cherry blossom.

There are several types of pink cassias, they all look quite similar and equally graceful with their pink ornamental blossoms and feathery foliage. When in bloom, they all seem to be covered with a mass of pink cloud.

### Did you know?

During summer, a single rainstorm may cause all the flowers to fall off a tree, transforming it from a 'pink cloud' to a seemingly dead tree.



## THE PUTRANJIVA TREE



Tall, with long drooping branches, the putranjiva is one of our most elegant trees. From a distance this aspect of the tree is very graceful with the branches swaying softly in the gentlest of breezes. This is the kind of tree that inspires poets. As you can see in the picture, the leaves are long ovals, ending in a little point. The edges of the leaves are a bit wavy.

The putranjiva flowers in May and June, but the creamy-white flowers are so tiny that they are almost unnoticeable till you go looking for them. The putranjiva provides deep shade in the summer and is planted along avenues. It is very common in parks too. Very often this tree is used as a hedge row because it grows quickly.

As the name suggests, the tree is also known as the 'child life' tree, due to its seeds. The nuts, when strung together into a necklace, are supposed to ward off the evil eye from the wearer.

In the picture, the seeds are still soft and green. Gradually they harden and become bigger; about two-thirds of an inch long. The big fruit bats that flap around in the twilight, eat the soft outer covering of the seeds and then drop the nuts wherever they happen to be flying by. In the forests, deer like to eat the covering of the seeds.

The leaves are used to feed cows and goats. Oil is also extracted from the seeds for burning in lamps.

### Did you know?

A tree especially for children, putranjiva seeds are used as lucky charms for the young.

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## THE RHODODENDRON TREE



If you get a chance to travel to the hills of north India in April and May, you might think the hills have been splashed with scarlet in patches. But as you come closer you will see that the splashes of red are actually flowers growing on rhododendron trees.

This tree grows at a height of around five thousand feet and is found all along the Himalayas. It is a medium-sized tree with dark green, oblong leaves with pointed tips. The leaves are shiny on top and silvery below. The flowers are trumpet-shaped. Many of them grow close to each other forming a 'ball' of flowers.

Sometimes the rhododendron tree is called the rose tree. This comes from Greek words, *rhodon* for a rose and *dendron*, a tree. In the hills the tree is known as lali burans. The red flowers are made into jams, chutneys and squashes as they are sour. Sometimes the hill people eat the very tender leaves. The young leaves are applied on the forehead to relieve headaches. This flower is very popular as a temple offering to the gods.

This also happens to be one of the most prominent trees to have been taken from India to the western countries. About a century ago, plant explorers took many wild rhododendrons to the west to plant in their gardens and parks. New varieties were also developed from the rhododendrons taken from the Himalayas.

### Did you know?

A lot of beautiful rhododendrons growing in Europe and North America can trace their roots back to the Himalayas!



## THE SILK COTTON TREE



This is one of our loftiest trees and perhaps one with the most eye-catching flowers. The trunk is straight with wide spreading branches. The base of the tree is much wider than the trunk. This is the tree's way of giving itself extra support when the trunk is very tall and the crown heavy. The bark is grey-brown and covered with sharp prickles that disappear as the tree grows older. The leaf has five to seven long, pointed leaflets, like the fingers of a hand.

The flowers are the greatest glory of the tree when they come out in February and March. The flowers may be apricot or orange-red in colour. They are large and grow on thick stalks. The fleshy petals curve outwards. There is a mass of pink stamens in the centre of the calyx, which is sticky, with a sweet juice.

After flowering, green egg-shaped pods filled with white down and packed with dark brown seeds come out. In time the pods burst and the fluff sails far and wide, carrying the seeds from the pods to form new trees. The fluff or the silk-cotton lies on the grasses under the tree and is collected to stuff soft pillows and cushions; it is known as semul. The flowers and the bark are used in ayurvedic medicine.

The tree has a strange name in Sanskrit 'yamadruma', or belonging to Yama's land, that is hell. This is because while flowers are very showy, the fruit is rarely eaten by humans. Deer love to eat the fallen flowers though.

### Did you know?

Snowfall in the plains? That's what you see if you look at the silk cotton tree in late spring on a breezy day as the fluff flies from the pods.



## THE TAMARIND TREE



The tamarind, better known as imli, is one of our most magnificent trees. It grows about fifty feet or more and gives dense, cool shade in the summer. The leaves are finely cut, which give the tree a ferny appearance. It has compound leaves, i.e. one leaf consists of many small leaflets. The young leaves are a fresh, light green and grow deeper in colour as they age.

The flowers grow together in small, loose clusters among the leaves. Each flower petal is green-gold, finely streaked with crimson, and the stamens are purple tipped with golden anthers. In early summer when the tree is covered with flowers, you might notice that the ground beneath the tamarind is covered with a thick carpet of petals. You can actually see a beautiful carpet of flowers spread under!

The imli pod is greenish-brown at first and then turns a deep brown with the sour, delicious pulp and seeds inside. The pulp from the pod is eaten in chutneys or used in curries. It is delicious with a little salt! The tamarind grows all over India but does not fruit so well in the north.

The young leaves and flowers of the tamarind tree are eaten as a vegetable. The leaves taste sour too. Birds, squirrels, monkeys and other animals of the forest love to eat tamarind. Imli is used in home remedies. The powder from the seeds is also used as medicine.

### Did you know?

Imli is not just a tasty food stuff. It is used in home medicinal remedies, for stomach complaints and as a tonic.





## THE WHITE OAK TREE



A famous tree, not just in India but around the world. There are various types of oak. Many varieties of the oak are found in the Himalayas. They all look somewhat alike with their twisted deep brown trunks and grey-green foliage. Perhaps the most common oak in India is known as the banj. It grows at heights of about 5000-

8000 feet. Oaks can be commonly seen on Himalayan slopes.

The longish leaves are stiff with toothed edges. They are green-grey on top and white below; when the wind blows the silvery undersides of the leaves are shown up. Oak flowers come out in drooping clusters of tiny flowers, which resemble fluffy tails of cats.

Oaks are famous for their acorns, a woody nut that grows enclosed in a cup. Forest animals are very fond of eating acorns. Squirrels collect them and store them in their holes for the winter when food is scarce.

Oak wood has many uses. It is very strong and used in the hills for building and furniture. In fact, a lot of the furniture that you have at home perhaps comes from oak varieties. Charcoal is also made out of oak wood. The pulp from oak is used to make wrapping paper and the bark is used for tanning.

### Did you know?

Oak flowers come out in catkins, which are drooping clusters of tiny flowers resembling fluffy tails of cats.



# HOW TO PLANT A TREE

Can anyone grow a tree? The answer is — yes, anyone who wishes and makes the effort. Growing a tree is not at all difficult. All you need is patience and care.

What must you have to grow a tree? Well, to start off you will require a seed or at least a sapling, which is a very young tree. You also require soil to plant the seed or the sapling in. This need not straightaway be on the ground. You can also plant the seed in a flower pot, or in fact any other container. This can later be transplanted in ground soil. The plant will require some amount of sunshine and water. You will have to see that the plant gets these adequately.

Seeds from trees like neem, gulmohar or maulsari are easy to grow. Seeds from fruits that you eat can also be planted. Mango, chikoo, and litchi seeds are easy to grow. Lemon and orange pips can also be planted.

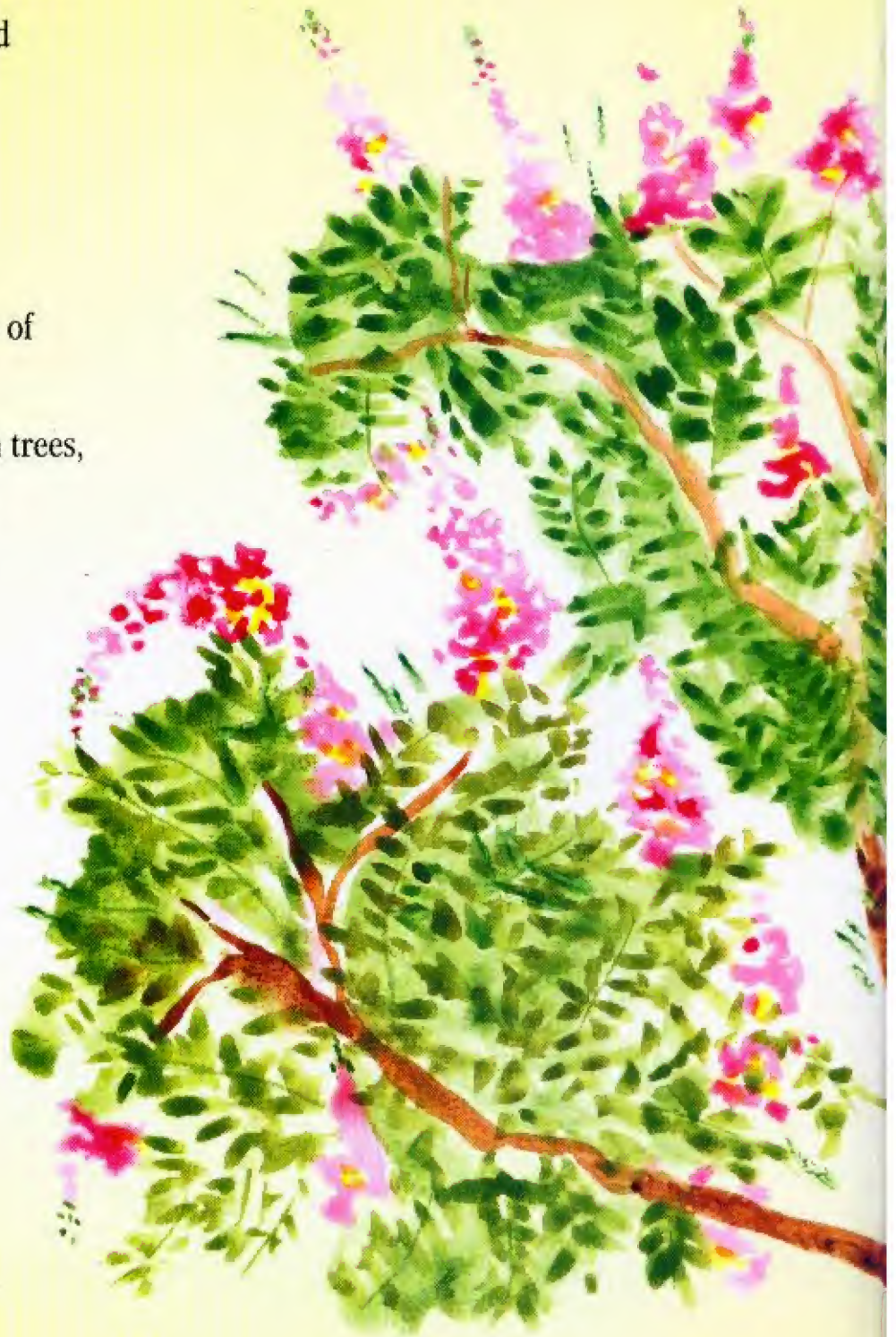
**You can plant a tree by following these simple steps:**

1. Soak the seed in slightly warm water overnight. Lemon and orange pips do not need soaking.
2. In a medium sized pot, fill equal parts of garden soil, manure and common sand. Place pieces of broken clay pots at the bottom, so if there is too much water, it will flow out.
3. Place the seed about an inch below the soil and water lightly everyday.
4. After two or three weeks a little sapling should begin to grow.
5. Place the pot in a good but not overly strong sunlight. About four to six hours of sunlight are enough.
6. Once it has grown for about six months to a year, you can plant it in the ground.

**T**rees are all around us.

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some we don't.

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some of our  
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